## ITRC Guidance Update

# SAM FALL FORUM MEETING October 2, 2014



G. Todd Ririe BP, La Palma, CA

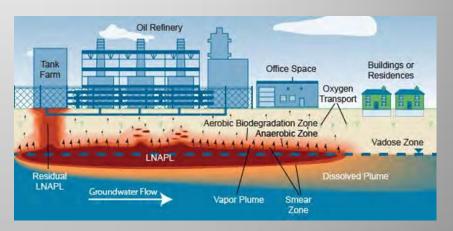


#### ITRC Document: What's In It?

- 1.0 INTRODUCTION
- 2.0 CHARACTERISTICS OF PETROLEUM VAPOR INTRUSION
- 3.0 SITE SCREENING USING VERTICAL SCREENING DISTANCE
- 4.0 SITE INVESTIGATION
- 5.0 MODELING
- 6.0 VAPOR CONTROL AND SITE MANAGEMENT
- 7.0 COMMUNITY ENGAGEMENT
- 8.0 REFERENCES
- APPENDIX A. PVI SURVEY SUMMARY OF STATE RESPONSES
- APPENDIX B. STATE GUIDANCE AND CONTACTS FOR PETROLEUM VAPOR INTRUSION
- APPENDIX C. CHEMISTRY OF PETROLEUM
- APPENDIX D. PETROLEUM VAPOR INTRUSION CONCEPTUAL SITE MODEL CHECKLIST

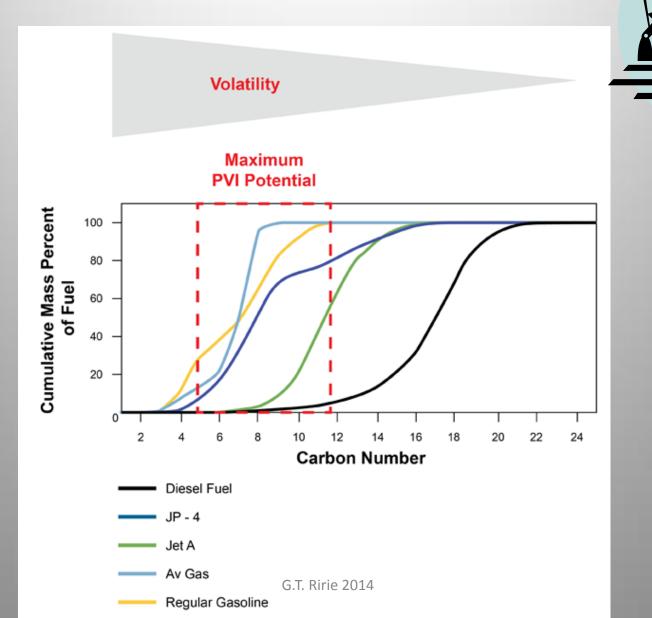
G.T. Ririe 2014

APPENDIX E. SELECTED EXAMPLES TYPES OF PETROLEUM SITES

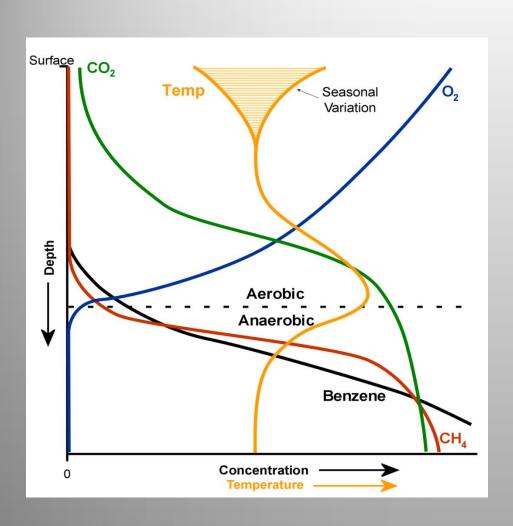


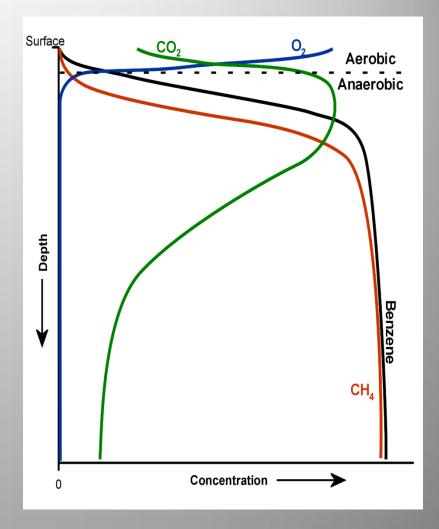
Zone

#### The TPH Issue



#### The "Clean Soil" Issue

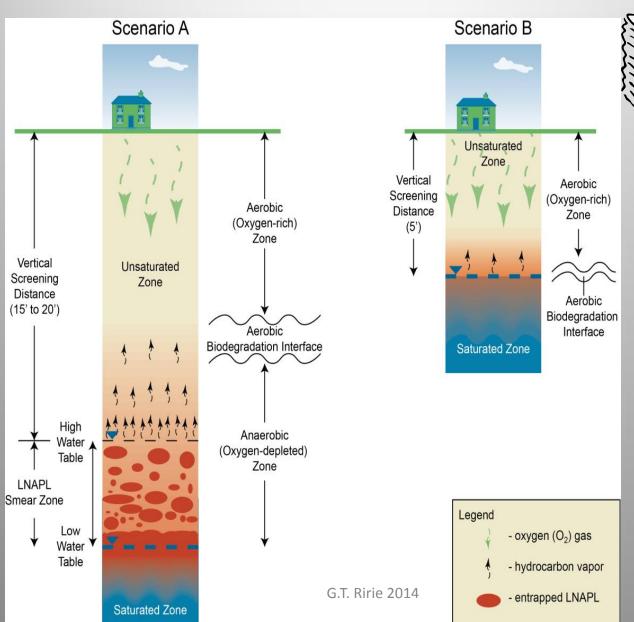




Clean Soil Model

**Dirty Soil Model** 

# Site Screening





# Site Investigation Approaches

Media Investigated	Evaluation Method	Considerations for PVI Sites
Groundwater	Attenuation factors or modeling based on site-specific conditions are used to estimate COC concentrations in indoor air.	Application of default attenuation factors will be conservative for PHCs as they do not account for bioattenuation. Alternatively, models that address bioattenuation can be employed.
Soil gas	Attenuation factors or modeling based on site-specific conditions are used to estimate COC concentrations in indoor air.	Fewer pathway assumptions required than for groundwater, but measurements may not be representative of sub-slab conditions. Application of default attenuation factors may be conservative for PHCs as they do not account for bioattenuation. Alternatively, models that address bioattenuation can be employed.
Sub-slab soil gas	Slab attenuation factors typically used to estimate COC concentrations in indoor air.	Fewest pathway assumptions required, but generic slab attenuation factors may not apply to the specific building.
Indoor air	Comparison to indoor air screening values and/or to subslab values.	Ubiquitous background sources likely to confound interpretation of VI source; seasonal variations may also be an issue.  G.T. Ririe 2014









### **Key Dates**



- Fall 2015: First class room training
- PVI Document currently at the Editor for formatting into web-based publication
- PVI Document ready on website in early 2015

Document will be posted on the ITRC page:



http://www.itrcweb.org/Guidance